

WHAT IS CLAIMED IS:

1. A semiconductor device comprising:

an interconnect made of a first conductive film and a second conductive film that are stacked in sequence from the interconnect underside on an insulating film formed on a substrate; and

a capacitor composed of a lower capacitor electrode made of the first conductive film, a dielectric film formed on the lower capacitor electrode, and an upper capacitor electrode made of the second conductive film and formed on the dielectric film.

2. A semiconductor device comprising:

an interconnect made of a first conductive film and a second conductive film that are stacked in sequence from the interconnect underside on an insulating film formed on a substrate;

a capacitor composed of a lower capacitor electrode made of the first conductive film, a dielectric film formed on the lower capacitor electrode, and an upper capacitor electrode made of the second conductive film and formed on the dielectric film; and

an extension interconnect made of the first conductive film connected to the interconnect made of the first and second conductive films in stack.

3. A semiconductor device comprising:

an interconnect made of a first conductive film and a second conductive film that are stacked in sequence from the interconnect underside on an insulating film formed on a substrate; and

a resistor made of the first conductive film and formed on the insulating film.

4. A semiconductor device comprising:

an interconnect made of a first conductive film and a second conductive film that are stacked in sequence from the interconnect underside on an insulating film formed on a substrate;

5 a capacitor composed of a lower capacitor electrode made of the first conductive film, a dielectric film formed on the lower capacitor electrode, and an upper capacitor electrode made of the second conductive film and formed on the dielectric film; and
a resistor made of the first conductive film and formed on the insulating film.

10 5. The semiconductor device of any one of Claims 1 through 4, wherein the first conductive film is made of a metal nitride.

6. The semiconductor device of Claim 5, wherein the second conductive film is made of an aluminum alloy.

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7. A method for fabricating a semiconductor device, comprising the steps of:

depositing a first conductive film and a dielectric film in sequence on an insulating film formed on a substrate;

selectively etching the dielectric film, thereby leaving the dielectric film where the
20 dielectric film is located in a first region in which a capacitor is to be formed;

depositing a second conductive film on the first conductive film so that the second conductive film covers the dielectric film; and

selectively etching the first and second conductive films, thereby forming in a second region an interconnect made of the first and second conductive films, while
25 forming in the first region the capacitor composed of a lower capacitor electrode made of

the first conductive film, the dielectric film, and an upper capacitor electrode made of the second conductive film, the second region being different from the first region.

8. A method for fabricating a semiconductor device, comprising the steps of:

5 depositing a first conductive film and a dielectric film in sequence on an insulating film formed on a substrate;

selectively etching the dielectric film, thereby leaving the dielectric film where the dielectric film is located in a third region in which a capacitor and an extension interconnect for a lower capacitor electrode forming the capacitor are to be formed;

10 depositing a second conductive film on the first conductive film so that the second conductive film covers the dielectric film; and

selectively etching the first and second conductive films, thereby forming in a fourth region an interconnect made of the first and second conductive films, while forming, in the third region, the extension interconnect and the capacitor composed of the lower capacitor electrode made of the first conductive film, the dielectric film, and an upper capacitor electrode made of the second conductive film, the fourth region being different from the third region.

9. A method for fabricating a semiconductor device, comprising the steps of:

20 depositing a first conductive film and a second insulating film in sequence on a first insulating film formed on a substrate;

selectively etching the second insulating film, thereby leaving the second insulating film where the second insulating film is located in a fifth region in which a resistor is to be formed;

25 forming a second conductive film on the first conductive film so that the second

conductive film covers the second insulating film; and

selectively etching the first and second conductive films, with the second insulating film being used as part of a mask, thereby forming in a sixth region an interconnect made of the first and second conductive films, while forming in the fifth region the resistor made
5 of the first conductive film, the sixth region being different from the fifth region.

10. The method of any one of Claims 7 through 9, wherein the first conductive film is made of a metal nitride.

10 11. The method of Claim 10, wherein the second conductive film is made of an aluminum alloy.